

Tailored Training Approaches

Army Need: To develop training approaches that address critical individual differences in Soldiers' backgrounds and skills to make training more effective, meaningful, and efficient.



Purpose: To develop measurement procedures and training techniques that can be applied to tailoring training in Army courses.

Products:

- Techniques for quickly assessing critical individual differences to address at the start of training and in the process of training
- Tailored training approaches for different skills – cognitive and hands-on.
- Guidelines for implementing tailored training approaches

Payoff:

- More effective training.
- Provides foundation for the TRADOC's Army Learning Concept 2015.

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Collaboration/coordination: TRADOC, USAMU, MCOE-DOTD, Infantry ALC, Engineer School, 198th Inf Bde



Tailored Training



- **Review of effective tailored training methods**
 - **Microadaptation**
 - **Human tutoring**
 - **Intelligent tutoring systems**
 - **Self-paced and accelerated learning**
 - **Learning in small groups**
 - **Aptitude by treatment interaction**
- **Best practices used by Army to tailor training (51 courses)**
 - **Little evidence of tailoring found: no pre-testing for experience or splitting on ability/knowledge, some human tutoring, microadaptation**
 - **Identified course conditions where tailoring most feasible**
 - **Early and frequent testing**
 - **Formation of small groups**
 - **Availability of supplemental materials**
 - **Mastery required for graduation**
 - **Graduation emphasis**
- **Measuring Differences in Soldier Knowledge, Skills, and Experience**
 - **Follow-on effort to identify best predictors on which to base tailored training**
 - **Prior knowledge as related to mental ability and experience**
 - **Engineer CCC (defensive operations) predictor skill set derived from course criteria**
- **Backwards Fading**
 - **From lit review, best tailoring approach for select Army tasks**
 - **Sequential, cumulative, single correct answer - previous research used engineering, algebra problems**
 - **Candidate tasks include troubleshooting equipment malfunctions, use of**



Tailored Training



- **Tailored Marksmanship Training in the Squad Designated Marksmanship Course**
 - **Tailored training experiment to compare AMU instructors developed tailored approaches**
 - **Also, examining predictors of marksmanship performance from TADSS performance**

- **Tailored Training Techniques for Raven SUAS Training**
 - **Developing Raven operator performance metrics**
 - **Identifying systematic Raven performance weaknesses amenable to tailored training**
 - **Plans to transfer metrics and instructional techniques to Raven Master Trainer course**

- **JRTC Actions on Contact**
 - **Latest project of DCOG sponsored Warrior Leadership Council; Terrain analysis next**
 - **Good success with product transition**